

E2.05 - San Marcos Heat

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Product Description

This product is beneficial because of the impact, and capabilities it can provide that will help cities/businesses devise strategies to alleviate heat caused by heat islands.

Spending Per Subsystem

Subsystem	Price
Sensors	\$10.43
Power	\$12.17
SD / Misc.	\$18.58
Total	\$41.18

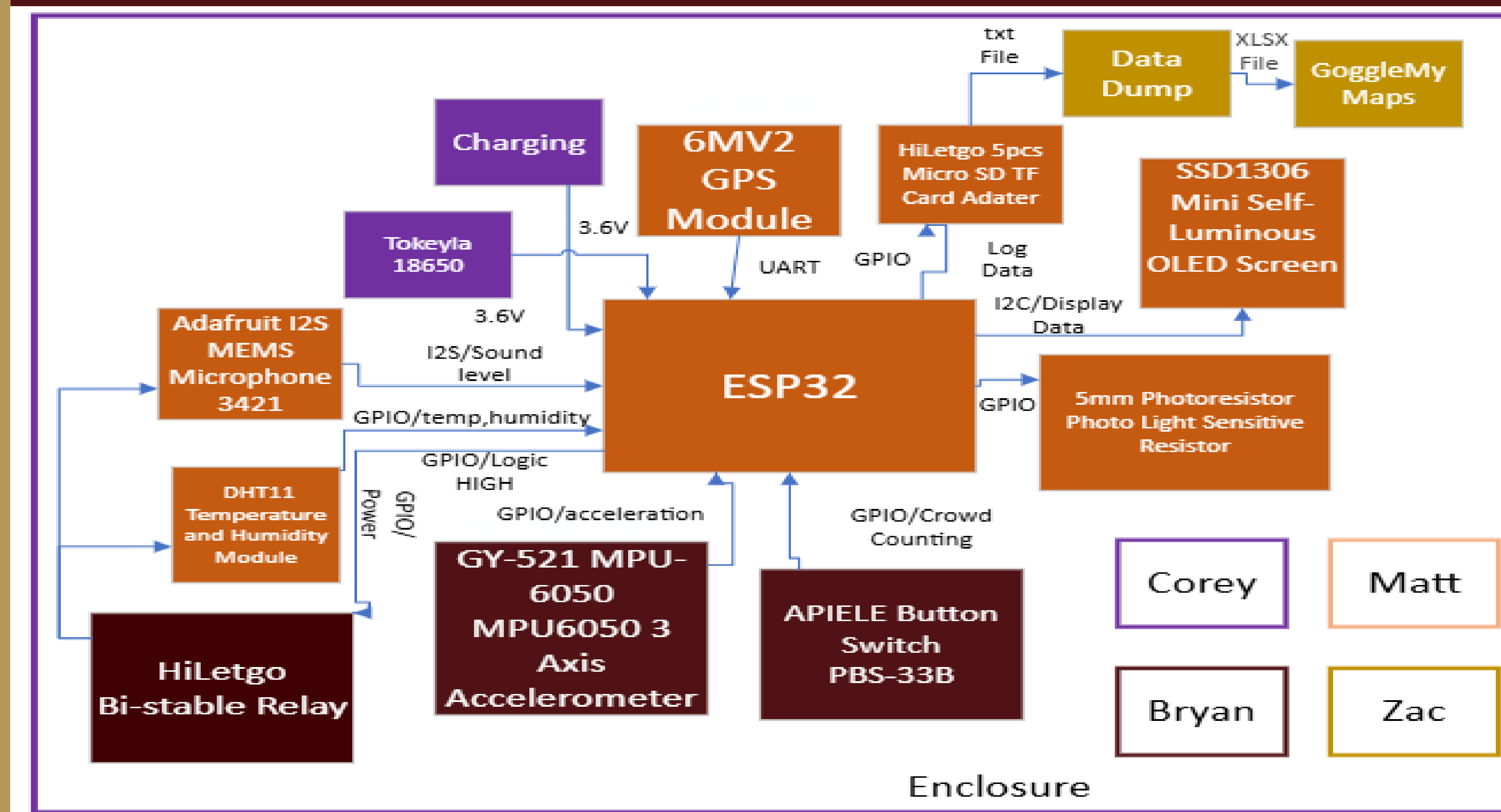
Features

- Battery life of 5.5hrs per charge
- Logs location, time, sound, light, temperature humidity and people
- Handheld mobile design
- Data saved to a 2GB micro-SD card
- Display the temperature, location humidity, battery %, and # of people on LCD screen
- User Manual

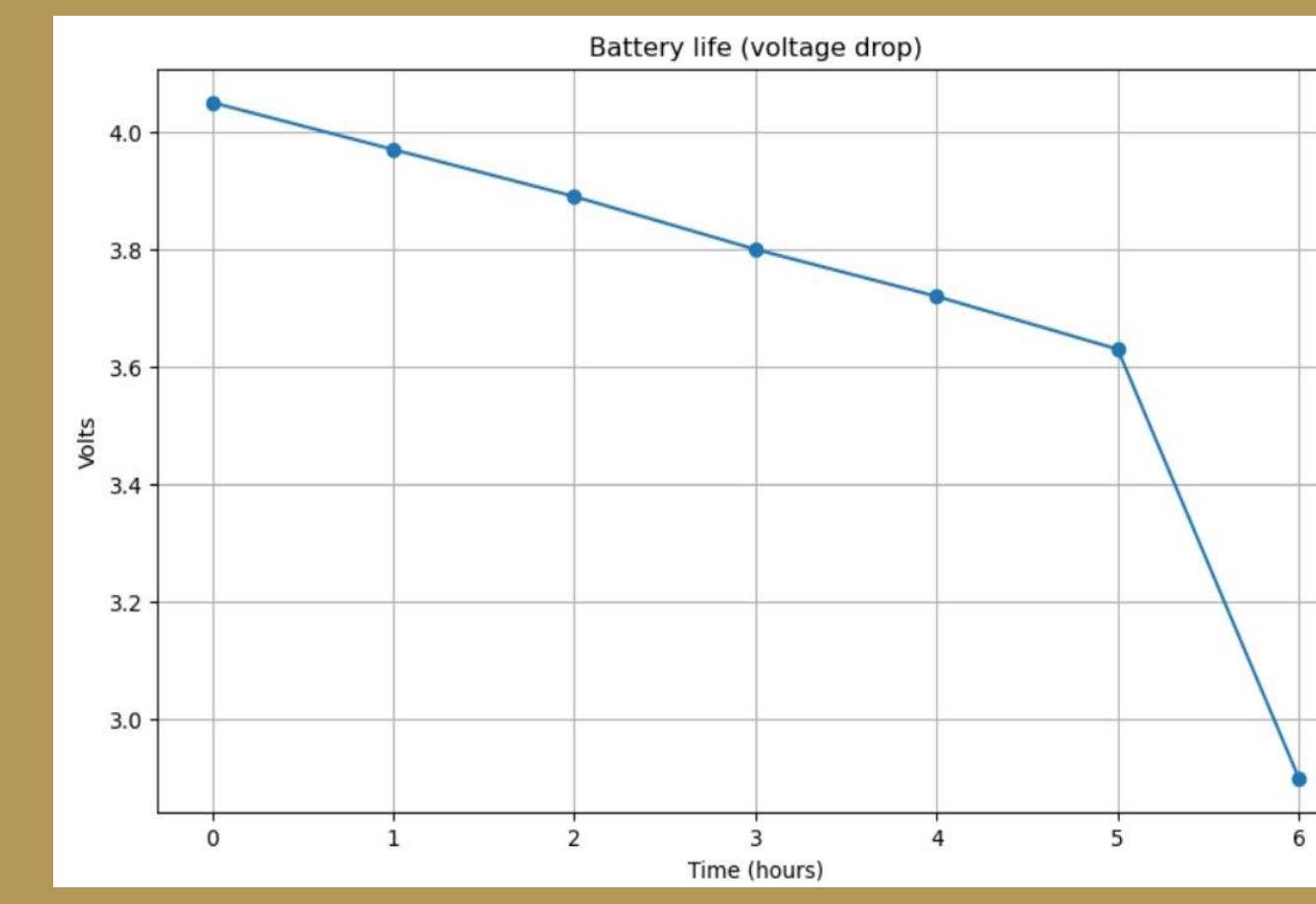
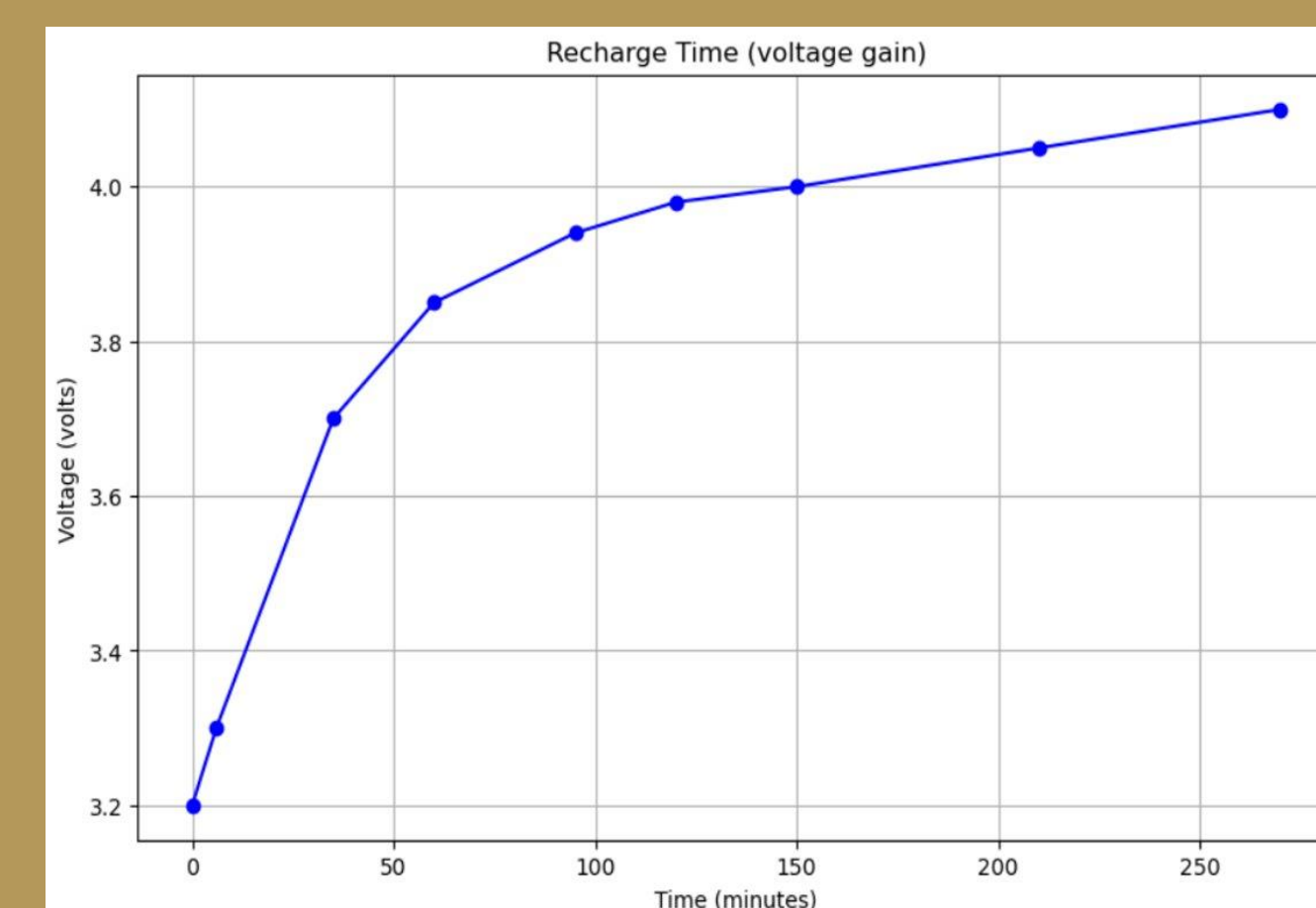
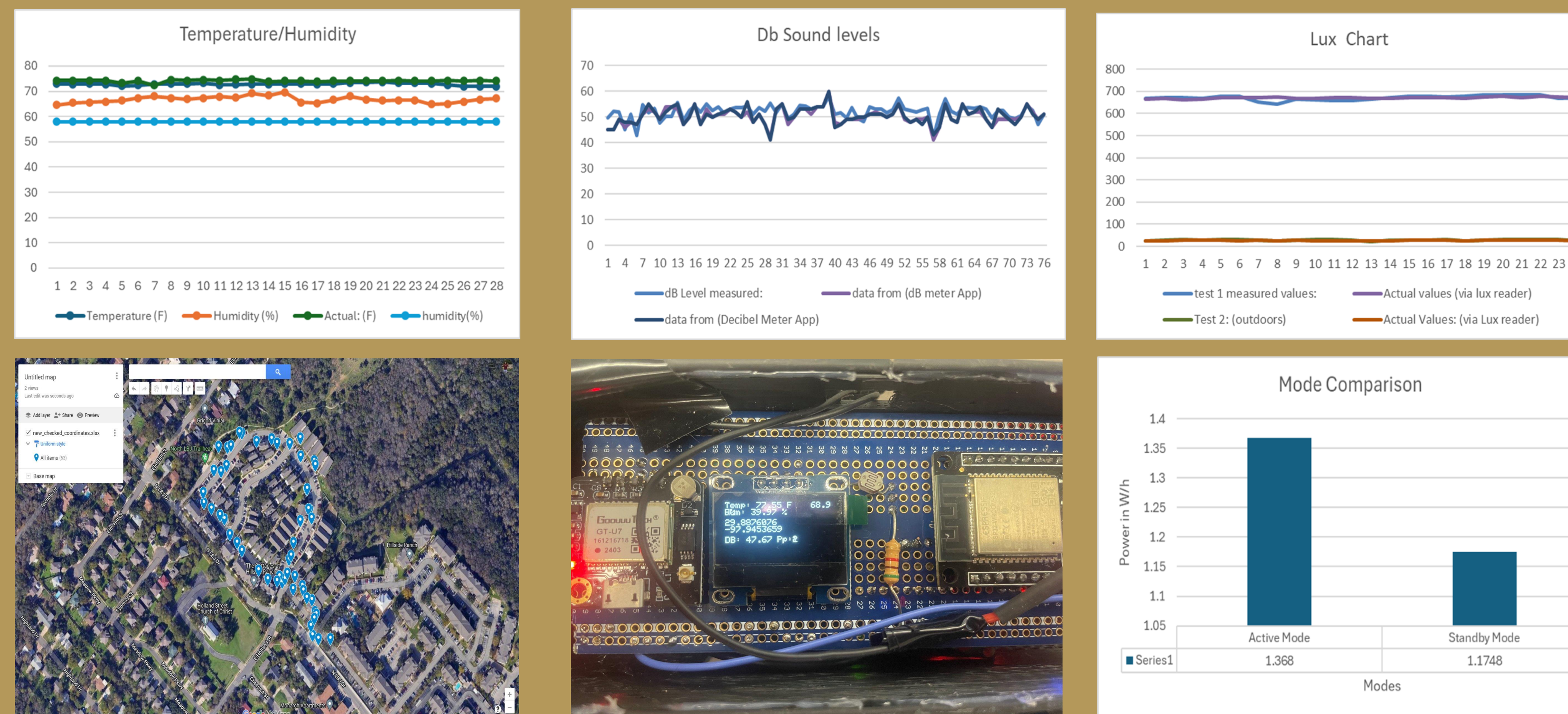


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Top Level Block Diagram



Sensor Data



Battery Results

Mode	Requirement	Measured Result
Battery life	4 hours minimum	5 hours & 30 minutes
Onboard Recharge	max 2x battery life hours	4 hours & 45 minutes
Current Draw	N/A	380mA

Enclosure Results

Function	Requirement	Measured Result
Drop Resistance	Survive 6 drops @ 6'	Fully functional
Water resistance	No water gets in Enclosure	Water leaked in case
Weight & Size	40x40x100mm 150g	70.1x78.3x160 mm 275g

Sensor Test Results

Sensors	Error %
Temp/Hum.	< 0.05%
GPS	< 0.05%
Light	< 0.05%
OLED	< 0.05%
SD	< 0.05%
Sound	< 0.05%

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